



**Operating Permit Issued Pursuant to Tennessee Air Quality Act**

Date Issued: November 3, 2014

Permit Number:  
069404P

Date Expires: November 2, 2024

**Issued To:**

Tennessee Department of Safety and Homeland Security  
Joelton Radio Site

**Installation Address:**

514 Morgan Ct.  
Joelton

**Installation Description:**

One 50 kW Propane Fired Emergency Generator  
Cummings Model 50GGPC  
Manufacture Year of Engine: 2013

**Emission Source Reference No.**

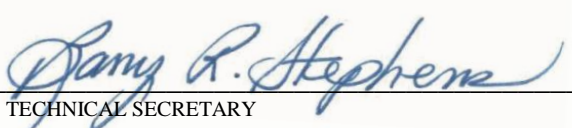
19-0096-01  
NSPS Subpart JJJJ  
NESHAP Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

**CONDITIONS:**

1. The application that was utilized in the preparation of this permit is dated October 8, 2014, and signed by Stephen Philyaw, Radio Systems Analyst for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**(Conditions continued on next page)**

  
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**NON-TRANSFERABLE**

**POST AT INSTALLATION ADDRESS**

2. The maximum heat input for this source shall not exceed 0.2 million Btu per hour. TAPCR 1200-03-09-.01(1)(d) and the application dated January 24, 2014.
3. Pursuant to 40 CFR §60.4243(d), the permittee must operate the emergency stationary ICE according to the following requirements. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the engine is not operated according to the following requirements, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.
  - (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
  - (b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in **(1) through (3)** below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **Condition 3(c)** counts as part of the 100 hours per calendar year allowed by this **Condition 3(b)**.
    - (1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
    - (2) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
    - (3) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(Conditions continued on next page)

(c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in **Condition 3(b)** above. Except as provided in (i) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ.

4. Only propane shall be used as fuel for this source.

TAPCR 1200-03-07-.07(2)

5. Particulate Matter (TSP) emitted from this source shall not exceed 0.6 lb/MMBtu (0.1 pound per hour). Compliance with this emission limit shall be assured by compliance with **Conditions 2 and 4** of this permit.

TAPCR 1200-03-06-.02(2)

6. Carbon Monoxide (CO) emitted from this source shall not exceed 519 grams per kilowatt-hour (57.2 lb/hr).

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

7. Volatile organic compounds (VOCs) emitted from this source shall not exceed 0.3 pounds per hour.

TAPCR 1200-03-09-.03(8)

**(Conditions continued on next page)**

8. Hydrocarbons and Nitrogen Oxides (HC + NO<sub>x</sub>) emitted from this source shall not exceed 13.4 grams per kilowatt-hour (1.5 lb/hr).

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

9. Compliance with the emission limits in **Conditions 6, 7, and 8** is based on compliance with **Conditions 2, 4, and 13** of this permit.

10. The generator shall be equipped with a non-resettable hour meter prior to startup of the engine.

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

11. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity except for one six-minute period per one (1) hour or more than twenty four (24) minutes in any twenty four (24) hours. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(1) and TAPCR 1200-03-05-.03(6)

12. The permittee shall keep a log of the number of operating hours for each month and each twelve (12) consecutive month interval at this source, in a form that readily provides the information required in the following table and shows compliance with **Conditions 3 and 4**. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. The permittee shall retain this record at the source location for a period of not less than two (2) years and keep this record available for inspection by the Technical Secretary or their representative.

TAPCR 1200-03-10-.02(2) (a)

Year:				
	Operating Hours per Month			
	Maintenance checks & readiness testing	Other non-emergency operation	Emergency operation	
Month				Comments**
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
<b>Totals</b>				
** The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.				

(Conditions continued on next page)

13. Pursuant to 40 CFR §60.4243, the permittee shall comply with either of the following requirements:
- (a) Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions and keep records of conducted maintenance to demonstrate compliance; or
  - (b) Keep a maintenance plan and records of conducted maintenance to demonstrate compliance, and to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Performance testing is not required for an owner or operator of a stationary SI internal combustion engine less than 100 hp.
14. Pursuant to §60.4245(a), the permittee must keep records of (a) through (d) as follows:
- (a) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (b) Maintenance conducted on the engine.
  - (c) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
  - (c) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a) (2), documentation that the engine meets the emission standards.
15. Under the Provisions of 40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), this facility is considered to be "new" stationary RICE located at an "Area Source." This unit is considered to be new because its construction commenced on or after June 12, 2006. (§63.6590)

This rule states that "new" RICE units at area sources that started up after January 18, 2008, must comply with the applicable emission limitations and operating limitations upon startup.

§63.6590(c) states that a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for stationary spark ignition internal combustion engines. No further requirements apply for such engines under Subpart ZZZZ.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

16. This permit is valid only at this location. TAPCR 1200-03-09-.03(6)

**(Conditions continued on next page)**

17. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.

TAPCR 1200-03-09-.01(1)(d)

18. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

TAPCR 1200-03-09-.03(8)

19. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-03-09-.02(3).

**(End of conditions)**

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